

B4 pal-prot A and secondarily coated with B7-1·Fcγ₁. For each proliferation assay, 1 x 10⁵ T-cells were incubated with 4 x 10⁴ B7-1·Fcγ₁-coated and mitomycin C-treated K562/REP7β cells for 60 h at 37° C. Wells were pulsed with 1 μCi [³H]thymidine for the last 16 h of the incubation period. Cells were harvested and counted on a Betaplate liquid scintillation counter.

Page 18, the paragraph under subheading "Example 4"

B5 DBA/2J mice were purchased from The Jackson Laboratory, Maine. The animals were inoculated intradermally with a lethal dose of L5178Y-R tumor cells and given subcutaneous injections of a cell vaccine as a treatment on days 5, 6, and 7 after the tumor inoculation. The same cell vaccine in Example 3 was used here, at a dose of 10⁶ cells per injection. Figure 10 shows that the cell vaccine improved the survival rate of the treated animals. In Fig. 10: open circle, an untreated control group (n=8); square, another control group that received a control vaccine generated by protein A transfer (n=8); closed circle, the test group that received the cell vaccine generated by protein transfer with the immune costimulatory fusion proteins in complex with lipitate protein A (n=8).

In the claims:

23. A cell having a transferred fusion protein, said fusion protein transferred by:

B6 coating the surface of said cell with a first protein, wherein said first protein is a lipidated protein; and

contacting said cell with a second protein, wherein said second protein is said fusion protein and is comprised of a first domain having affinity for said first protein and a second domain having *trans* signaling and/or adhesion function.

37. A cancer vaccine comprising:

B7 Tumor or other antigen presenting cells having a transferred fusion protein, said fusion protein transferred by coating the surface of said cell with a first protein, wherein said first protein is a lipidated protein; and

contacting said cells with a second protein, wherein said second protein is said fusion protein and is comprised of a first domain having affinity for said first protein and a second domain having *trans* signaling and/or adhesion function, said cells in a suitable carrier.

Please cancel Claims 45 and 48.

Please add the following new claims:

51. The cell of Claim 23, wherein said first protein is selected from the group consisting of lipidated protein A and lipidated protein G.
52. The cell of Claim 23, wherein said first protein is palmitated protein A.
53. The cell of Claim 23, wherein said first domain is attached at the amino terminus of said second protein.
54. The cell of Claim 23, wherein said first domain is attached at the carboxyl terminus of said second protein.
- B8 55. The cell of Claim 23, wherein said second domain encodes a type I membrane protein.
56. The cell of Claim 23, wherein said second domain encodes a type II membrane protein.
57. The cell of Claim 23, wherein said second domain encodes a costimulator.
58. The cell of Claim 23, wherein said second domain encodes an inhibitor.
59. The cell of Claim 57, wherein said costimulator is selected from the group consisting of B7-1, B7-2, ICAM-1, ICAM-2, ICAM-3, CD48, LFA-3, 4-1BB ligand, CD30 ligand, CD40 ligand, and heat stable antigen.
60. The cell of Claim 59, wherein said second protein is B7-1·Fcγ₁.
61. The cell of Claim 58, wherein said inhibitor is selected from the group consisting of CD8, Fas ligand and a single chain Fv derivative of immunoglobulin.

REMARKS

Claims 45 and 48 have been cancelled. New claims, Claims 51-61, are added; the claims now pending are Claims 23, 37-44, 46, 47, 49 and 50-61. No new matter is added with the addition of Claims 51-62; these are duplicates of the claims that depend from Claim 37. New drawings are submitted herewith with corrections as requested by the draftsman and Examiner.